

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III (New) EXAMINATION – WINTER 2018****Subject Code: 2132902****Date: 05/12/2018****Subject Name: Yarn Manufacturing-I****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(a) Mention the objectives of Blowroom.	3
	(b) Write short note on Grid.	4
	(c) Explain the use of (i) Gravity trap (ii) Metal detectors and (iii) Dust separators in blow-room.	7
Q.2	(a) Briefly explain objects of card.	3
	(b) Explain working of Step cleaner with a suitable sketch.	4
	(c) What is importance of grinding for card clothing? Hence explain any one type of grinding roller with neat sketch.	7
	OR	
	(c) Explain recent development at feed roller and licker in roller of card with suitable diagram.	7
Q.3	(a) What is tandem card?	3
	(b) Bottom calendar roller dia = 7.2 inch, rpm = 12 & wt. of every yards lap is 12 oz and cleaning efficiency 78%. Find out the production of Blow room per shift.	4
	(c) Give the route of passage of material in the Carding machine.	7
	OR	
Q.3	(a) State the objectives of Ginning.	3
	(b) Write down the formula for the production calculation of card in kgs/shift. Also write the formula for calculating cleaning efficiency of blow room.	4
	(c) Write a short note on processing of manmade fibre at Blowroom.	7
Q.4	(a) Mention the advantages of Baling operation.	3
	(b) Write the importance of sliver coiling mechanism used in carding machine.	4
	(c) Explain Knife roller gin with suitable diagram.	7
	OR	
Q.4	(a) What is IGS at Card?	3
	(b) State various lap defects and remedial measures for the same.	4
	(c) Explain with neat sketch Multiple Mixer.	7
Q.5	(a) Enlist types of ginning machine. Name the ginning machine suitable for long and short staple fibers.	3
	(b) Explain carding action and stripping action.	4
	(c) Explain the working of Scutcher section at Blowroom.	7
	OR	
Q.5	(a) Explain flexible card clothing in brief.	3
	(b) Discuss the latest developments in Ginning machine.	4
	(c) Explain piano feed mechanism of blow room with diagram.	7
